

# $^3\text{He}(n,p)^3\text{H}$ reaction & HANARO specs

- Cross section: 5330 b
- He atom density under 1 atm:  $2.69 \times 10^{19} \text{ cm}^{-3}$

Holes	Functions	Neutron Flux( $\text{n}/\text{cm}^2\cdot\text{sec}$ )	$^3\text{H}$ production rate( $^3\text{H}/\text{cm}^3\cdot\text{sec}$ )	For 1.2 $\text{cm}^3$ chamber(paper, $^3\text{H}/\text{sec}$ )
IP(17)	Multifunctional	$1.8 \times 10^{13} \sim 1.3 \times 10^{14}$	$2.6 \times 10^{12} \sim 1.9 \times 10^{13}$	$3.1 \times 10^{12} \sim 2.2 \times 10^{13}$
NTD(2)	Si doping	$3.7 \sim 4.0 \times 10^{13}$	$5.3 \sim 5.7 \times 10^{12}$	$6.4 \sim 6.9 \times 10^{12}$
LH(1)	Isotope production	$7.4 \times 10^{13}$	$1.1 \times 10^{13}$	$1.3 \times 10^{13}$